

Please cancel claims 1-26.

Please add the following new claims:

27. An integrated circuit comprising: a gate array architecture;

said gate array architecture including a semiconductor substrate having a plurality of N-type diffusion regions and P-type diffusion regions; said diffusion regions having partially overlying polysilicon landing sites, at least one forming both N-type and P-type transistors;

wherein the regions are relatively-sized to form two distinct transistor sizes, smaller N- and P-type transistors and larger N- and P- type transistors;

the relatively sized P-type diffusions regions being substantially adjacent;

successive rows of small diffusion regions are followed by successive rows of regular-sized diffusion regions; and

immediately successive rows within similarly-sized diffusion regions have opposite polarity.

28. The integrated circuit of claim 27, wherein the ratio between the two distinct transistor sizes is on the order of one-third.

29. The integrated circuit of claim 28, wherein the ratio between the capacitance of the larger and smaller relatively-sized transistors is on the order of one-third.

30. The integrated circuit of claim 27, wherein said partially overlying polysilicon landings for the smaller and larger transistors are not connected.

31. The integrated circuit of claim 30, and further comprising an interconnect overlying said gate array architecture;

the interconnect being adapted to connect the transistors of the gate array architecture to form a flip-flop.

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- circuit of claim 31, wherein the interconnects are arranged in a gate array architecture so that the internal connections are made by smaller transistors.
- circuit of claim 32, wherein said gate array architecture is a full-custom circuit.
- circuit of claim 32, wherein said integrated circuit is a microprocessor device.
- circuit of claim 32, wherein said integrated circuit is a digital logic device.
- circuit of claim 35, wherein said integrated circuit is a microprocessor device.
- circuit of claim 36, wherein said personal computer is a desktop computer.
- comprising: a storage medium, said storage medium storing instructions, when executed, resulting in the capability of fabricating the integrated circuit chip; and
- architecture comprising a plurality of N-type diffusion regions having partially overlying polysilicon gates; P-type transistors;
- N- and P-type transistors are relatively-sized to form two distinct sizes of N- and larger N- and P-type transistors;
- the larger P-type diffusion regions being substantially larger than the small diffusion regions of small diffusion regions are followed by another set of small diffusion regions and
- successive rows within similarly-sized diffusion regions.
- claim 38, wherein said instructions, when executed, result in the fabrication of the gate array architecture, wherein the area of the gate array architecture is on the order of one-third.

40. The article of claim 39, wherein said instructions, when executed, result in the capability to design the layout of the gate array architecture, wherein said partially overlying polysilicon landings for the smaller and larger transistors are not connected.
41. The article of claim 40, wherein said instructions, when executed, result in the capability to design the layout of a metallization interconnect overlying said gate array architecture.
42. The article of claim 41, wherein said instructions, when executed, result in the capability to design the layout of a metallization interconnect overlying said gate array architecture, wherein said metallization interconnect couples the transistors of the gate array architecture to form a flip-flop.
43. The article of claim 42, wherein said instructions, when executed, result in the capability to design the layout of a metallization interconnect overlying said gate array architecture that connects the transistors of the gate array architecture so that the internal clock buffers of the flip-flop are formed from the smaller transistors.

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